

CLAIMS

1. A machine translation system, comprising:

a proper noun user dictionary data generating section for reading a proper noun from a proper noun storage section storing proper nouns described in one language, and automatically generating a corresponding character string corresponding to the proper noun;

a proper noun user dictionary output section for outputting a pair including the proper noun described in the one language and the corresponding character string; and

a machine translation section for converting and thereby translating, according to the pair including the proper noun described in the one language and the corresponding character string, the corresponding character string included in sentence structure inputted thereto into the proper noun described in the one language.

2. A machine translation system, comprising:

a proper noun user dictionary data generating section for reading a proper noun from a proper noun storage section storing proper nouns described in one language, and automatically generating a corresponding character string corresponding to the proper noun;

a proper noun user dictionary storage section for storing and keeping therein proper noun user dictionary data including the pair of the proper noun and the corresponding character string;

a proper noun user dictionary output section for outputting a pair including the proper noun and the corresponding character string included in the proper noun user dictionary; and

a machine translation section for converting and thereby translating, according to the proper noun user dictionary, the corresponding character string included in sentence structure inputted

thereto into the proper noun described in the one language.

3. A machine translation system in accordance with claim 1 or 2, wherein:

the proper noun user dictionary data generating section reads a proper noun from map information including proper nouns and automatically generates corresponding character strings corresponding to the proper nouns; and

the proper noun user dictionary output section outputs a map in which the corresponding character string is disposed in the vicinity of the proper noun included in the map.

4. A machine translation system in accordance with one of claims 1 to 3, further comprising:

an imaging section for producing an image; and

a character recognizing section for recognizing a proper noun character string in image data obtained by the imaging section, wherein

the proper noun user dictionary data generating section automatically generates a corresponding character string corresponding to the proper noun character string recognized as above.

5. A machine translation system in accordance with one of claims 1 to 4, comprising in place of the proper noun user dictionary data generating section:

an audio synthesizing section for reading out a proper noun from the proper noun storage section storing proper nouns described in an arbitrary original language, and synthesizing and outputting a sound corresponding to the proper noun; and

an audio recognizing section for recognizing the sound

synthesized and outputted as above and automatically generating a corresponding character string corresponding to the proper noun.

6. A server device for supplying proper noun information to the machine translation system in accordance with one of claims 1 to 5, comprising:

a regional proper noun information storage section for storing therein, according to regions, proper nouns described in arbitrary one language; and

a proper noun information selecting and transmitting section for receiving positional information from the machine translation system and selectively transmitting proper noun information according to the positional information.

7. A server device, comprising, in place of the machine translation section of the machine translation system in accordance with one of claims 1 to 5, an automatic interpretation section for converting and outputting, according to the proper noun user dictionary, the corresponding character string included in a sound inputted thereto into the sound of the corresponding proper noun in the one language.

8. A machine translation method using a machine translation system to conduct machine translation, comprising:

reading out, by the proper noun user dictionary data generating section of the machine translation system, a proper noun from a proper noun storage section storing proper nouns described in arbitrary one language, and automatically generating a corresponding character string corresponding to the proper noun;

outputting, by the proper noun user dictionary output section of

the machine translation system, a pair including the proper noun and the corresponding character string to guide an input of a translation object sentence including the corresponding character string;

receiving, by an input section of the machine translation system, an input of a translation object sentence; and

converting and thereby translating, by the machine translation section of the machine translation system, according to the proper noun user dictionary, the corresponding character string included in the translation object sentence inputted thereto into the proper noun described in the one language.

9. A machine translation method using a machine translation system, comprising:

reading out, by the proper noun user dictionary data generating section of the machine translation system, a proper noun from a proper noun storage section storing proper nouns described in arbitrary one language, and automatically generating a corresponding character string corresponding to the proper noun;

storing, by the proper noun user dictionary data generating section of the machine translation system, the proper noun and the corresponding character string in the proper noun user dictionary storage section with a relationship established therebetween;

outputting, by the proper noun user dictionary output section of the machine translation system, a pair including the proper noun and the corresponding character string included in the proper noun user dictionary to guide an input of a translation object sentence including the corresponding character string;

receiving, by an input section of the machine translation system, an input of a translation object sentence; and

converting and thereby translating, by the machine translation

section of the machine translation system, according to the proper noun user dictionary, the corresponding character string included in the translation object sentence inputted thereto into the proper noun described in the one language.

10. A machine translation method in accordance with claims 8 or 9, wherein:

the proper noun user dictionary data generating section reads out a proper noun from map information including proper nouns and automatically generates a corresponding character string corresponding to the proper noun; and

the proper noun user dictionary output section outputs a map in which the corresponding character string is disposed in the vicinity of the proper noun included in the map to guide an input of a translation object sentence including the corresponding character string.

11. A machine translation method in accordance with one of claims 8 to 10, further comprising:

producing, by the imaging section of the machine translation system, an image in which a proper noun described in an arbitrary original language is written; and

recognizing, by the character recognizing section of the machine translation section, a proper noun character string in the image data produced as above, wherein

the proper noun user dictionary data generating section of the machine translation system automatically generates a corresponding character string corresponding to the proper noun character string recognized as above.

12. A machine translation method in accordance with one of

claims 8 to 11, comprising in place of the step of reading, by the proper noun user dictionary data generating section of the machine translation system, a proper noun from a proper noun storage section storing proper nouns described in arbitrary one language, and automatically generating a corresponding character string corresponding to the proper noun;

reading out, by the audio synthesizing section of the machine translation system, a proper noun from the proper noun storage section storing proper nouns described in arbitrary one language, and synthesizing and outputting a sound corresponding to the proper noun; and

recognizing, by the audio recognizing section of the machine translation system, the sound synthesized and outputted as above and automatically generating a corresponding character string corresponding to the proper noun.

13. A machine translation method in accordance with one of claims 8 to 12, comprising:

transmitting, by the machine translation system, positional information to a server device comprising a regional proper noun information storage section for storing therein proper nouns described in arbitrary one language, the proper nouns being grouped according to regions; and

selectively transmitting, by the server device, proper noun information according to the positional information.

14. An automatic interpretation method for making an automatic interpretation system comprising an automatic interpretation section achieve a machine translation method in accordance with one of claims 8 to 13, wherein;

an input section of the automatic interpretation system receives a verbal translation object sentence; and

the automatic interpretation section of the automatic interpretation system converts and outputs, according to the proper noun user dictionary, the corresponding character string included in a sound inputted thereto into the sound of the corresponding proper noun in the one language.

15. A computer program for causing a computer constituting a machine translation system for machine translation to execute the followings:

proper noun user dictionary data generating processing for reading out a proper noun from a proper noun storage section storing proper nouns described in arbitrary one language, and automatically generating a corresponding character string corresponding to the proper noun;

proper noun user dictionary output processing for outputting a pair including the proper noun and the corresponding character string included in the proper noun user dictionary to guide an input of a translation object sentence including the corresponding character string;

translation object sentence input receiving processing for receiving an input of a translation object sentence; and

machine translation processing for converting and thereby translating, according to the proper noun user dictionary, the corresponding character string included in the translation object sentence inputted thereto into the proper noun described in the one language.

16. A computer program for causing a computer constituting

a machine translation system for machine translation to execute the followings:

proper noun user dictionary data generating processing for reading a proper noun from a proper noun storage section storing proper nouns described in arbitrary one language, and automatically generating a corresponding character string corresponding to the proper noun;

proper noun user dictionary storing processing for storing the proper noun and the corresponding character string associated each other in the proper noun user dictionary storage section;

proper noun user dictionary output processing for outputting a pair including the proper noun and the corresponding character string included in the proper noun user dictionary to guide an input of a translation object sentence including the corresponding character string;

translation objective sentence input receiving processing for receiving an input of a translation object sentence; and

machine translation processing for converting and thereby translating, according to the proper noun user dictionary, the corresponding character string included in the translation object sentence inputted thereto into the proper noun described in the one language.

17. A computer program in accordance with claim 15 or 16, the program causing the computer to execute the followings:

processing, as the proper noun user dictionary data generating processing, for reading a proper noun from map information including proper nouns and automatically generating a corresponding character string corresponding to the proper noun; and

processing, as the proper noun user dictionary output

processing, for outputting a map in which the corresponding character string is disposed in the vicinity of the proper noun included in the map to guide an input of a translation object sentence including the corresponding character string.

18. A computer program in accordance with one of claims 15 to 17, the program causing the computer to further execute the followings:

image input processing for inputting an image in which a proper noun described in arbitrary one language is written; and

character recognizing processing for recognizing a proper noun character string in the image produced as above, wherein

processing, as the proper noun user dictionary data generating processing, for automatically generating a corresponding character string corresponding to the proper noun character string recognized as above.

19. A computer program in accordance with one of claims 15 to 18, the program causing the computer to further execute the followings:

audio synthesizing processing for reading a proper noun from the proper noun storage section storing proper nouns described in arbitrary one language, and synthesizing and outputting a sound corresponding to the proper noun, in place of the proper noun user dictionary data generating processing; and

audio recognizing processing for recognizing the sound synthesized and outputted as above and automatically generating a corresponding character string corresponding to the proper noun.

20. A computer program in accordance with one of claims 15

to 19, causing the computer to execute the followings:

processing for transmitting positional information to a server device comprising a regional proper noun information storage section for storing therein proper nouns described in arbitrary one language, the proper nouns being grouped according to regions; and

processing for receiving proper noun information according to the positional information from the server device.

21. A computer program in accordance with one of claims 15 to 20, the program causing a computer constituting an automatic interpretation system for automatic interpretation to execute the followings:

translation objective sentence input receiving processing for receiving an input of a translation object sentence in a voice, in place of the translation object sentence input receiving processing and the machine translation processing; and

automatic interpretation processing for converting and outputting, according to the proper noun user dictionary, the corresponding character string included in a sound inputted thereto into the sound of the corresponding proper noun in the one language.